Operating Instructions

SolConeX Plug

> G579/12

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2 General Information

2.1 Manufacturer

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2.2 Operating Instructions Information

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Subject to alterations.

3 Intended Use

The plug G579/12 is electrical equipment. It connects portable and stationary electrical equipment as well as cables and circuits.

4 General Safety Instructions

The devices must be used only for the intended purpose. Incorrect or impermissible use or non-compliance with these instructions invalidates our warranty provision. No changes to the device are permitted. Use the device only if it is undamaged and clean.

⚠ WARNING
Installation, maintenance, overhaul and repair may only be carried out by appropriately authorised and trained personnel.

Observe the following information during installation and operation:

- National and local safety regulations
- National and local accident prevention regulations
- National and local assembly and installation regulations
- Generally recognized technical regulations
- Safety instructions in these operating instructions
- Characteristic values and rated operating conditions on the rating and data plates
- Additional instruction plates fixed directly to the device

5 Conformity to Standards

The relevant standards are listed in the EC Declaration of Conformity.

6 Transport and Storage

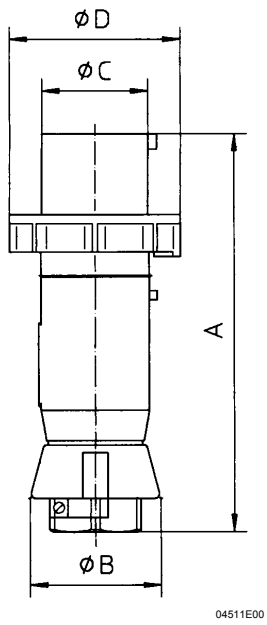
- Transport and storage are only permitted in the original packing.

7 Technical Data

Version	**G579/12 plug**
Rated operational voltage	max. 690 V
Rated operational current	63 A ≥100 Hz, 50 A
Rated insulation voltage	max. 750 V
Connection cross-section	max. 16 mm^2
Cable entries	24 ... 36 mm cable diameter
Tightening torque	max. 2 Nm
Ambient temperature	- 20 ... + 40 °C - 45 ... + 55 °C on request
Enclosure material	Polyamide
Degree of protection	IP66 acc. to IEC/EN 60529

8 Dimensions

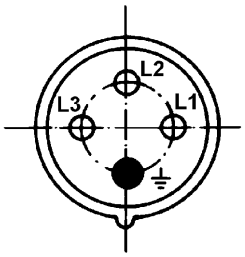
Dimensional Drawings (All Dimensions in mm) - Subject to Alterations



	[mm]
A	260
B	84
C	69.5
D	112

9 Arrangement of Contact Pins and Terminal Marking

View of the contact pins from the front. The illustrations show the 6 h position.



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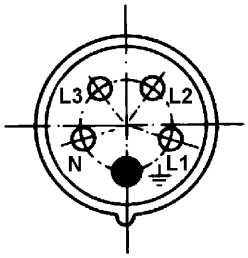
3 P + PE



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3P + N + PE

No. of poles	Frequency	Rated operational voltage	Colour code	Earth contact position
3 P + PE	50 and 60 Hz	100 ... 130 V	yellow	4 h
		200 ... 250 V	blue	9 h
		380 ... 415 V	red	6 h
	60 Hz	440 ... 460 V [1)]	red	11 h
	50 and 60 Hz	480 ... 500 V	black	7 h
		600 ... 690 V	black	5 h
		after isolating transformer	[4)]	12 h
	50 Hz 60 Hz	380 V [2)] 440 V [2)]	red	3 h
	100 ... 300 Hz	> 50 V	green	10 h [3)]
	> 300 ... 500 Hz	> 50 V	green	2 h
3P + N + PE	50 and 60 Hz	57 / 100 ... 75 / 130 V	yellow	4 h
		120 / 208 ... 144 / 250 V	blue	9 h
		200 / 346 ... 240 / 415 V	red	6 h
		277 / 480 ... 288 / 500 V	black	7 h
		347 / 600 ... 400 / 690 V	black	5 h
	60 Hz	250 / 440 ... 265 / 460 V	red	11 h
	50 Hz	220 / 380 V [2)]	red	3 h
	60 Hz	250 / 440 V [2)]		
	100 ... 300 Hz	> 50 V	green	10 h
	> 300 ... 500 Hz	> 50 V	green	2 h
Any no. of poles	All nominal operating voltages and/or frequencies not covered by other arrangements.			1 h

Colour code and arrangement of the earth contact pin, relative to polarizing slot, for different voltages and frequencies according to IEC/EN 60309-2

1) Mainly for ship installations

2) Only for refrigerated containers (according to ISO standards)

3) Not standardized but recommended preferred position

4) Colour code in accordance with voltage colour code

10 Assembling and Dismantling

Operating position

When unplugged, the plug should be suspended, with the contact pins pointing downward.

☞	To protect the contact pins against pollution, a suitable protective cap should be used (For R. STAHL order no. see "Spare parts and accessories").

11 Installation

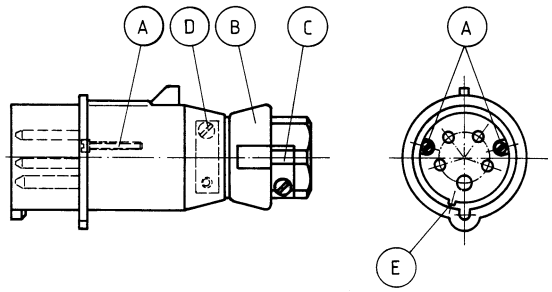
Electrical connection

- The conductor must be carefully connected.
- The conductor insulation must reach to the clamping points.
- Do not damage the conductor (nicking) when removing the insulation.
- Select suitable cables to be used and appropriate way of leading them to ensure that the maximum permitted conductor temperature and the maximum permitted surface temperature is not exceeded.

Protective conductor connection

- A protective conductor is always required.

Connection



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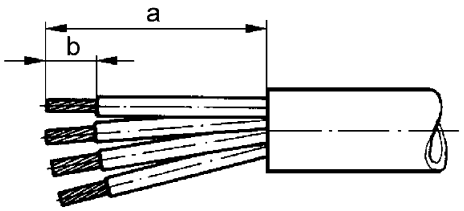
A = Screw
B = Pressure screw
C = Clamp
D = Strain relief
E = Guiding groove

- Loosen screws (A) and extract the plug insert manually from the enclosure.
- Loosen clamp (C) and pressure screw (B).
- Remove the dust protection plate, and take out the pressure ring and seal.
- Push the cable (cable diameter max. 35 mm) through the pressure screw, pressure ring, seal and enclosure.
- If necessary, increase the internal diameter of the seal by trimming it to match the cable diameter.

▶ Strip the insulation from the cable (see figure).



a [mm]	b [mm]
80	17

09290T00

☞	On the connection side, the contact pin carrier is marked with "Abisolation" (insulation stripped) next to the protective conductor connection symbol. The indentation below indicates the correct stripping length.

▶ Connect the cable to the plug insert. The stripped cable ends must be pushed fully underneath the clamping plate.
▶ Align the cable such that the clamping points are not under strain.
▶ Mount the strain relief (D).
▶ Fasten the plug insert in the enclosure such that key and guiding groove (E) match.
▶ Press the seal into the enclosure.
▶ Place the pressure ring on the seal.
▶ Tighten the pressure screw (B).
▶ Secure the pressure screw with the clamp (C).

12 Putting into Service

Before putting into service

▶ Make sure that the components are not damaged.
▶ Make sure that the device has been installed correctly.
▶ Remove any foreign objects from the device.
▶ Check if cable glands and stopping plugs are tight.
▶ Check if screws and nuts are fastened tightly.
▶ Inspect the cable glands for signs of damage.
▶ Check the tightening torques.
▶ Make sure that the bayonet lock is tightened correctly.

⚠ WARNING
▶ The plug may only be used when fully mounted. ▶ The plug pin surface must not be damaged. ▶ Excessive tightening of the components can impair the degree of protection.

13 Maintenance, Overhaul and Repair

⚠ WARNING
▶ Do not open when live! ▶ The functioning of the plug must always be checked after any system short-circuit.

The following details must be checked during maintenance:

- ▶ Cables are held securely in place by the terminals
- ▶ Compliance with the permissible temperatures
- ▶ Damage to the enclosure and seals
- ▶ Surface of the plug pins for damage

Maintenance information

- ▶ If required, clean plug pins
- ▶ After 1000 mating cycles, lubrication, after previous cleaning, with the lubricating oil **KLÜBERALFA KRA 3-730** is recommended.

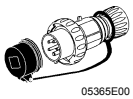
⚠ WARNING
It is not allowed to use lubricating greases based on mineral oils!

14 Cleaning

- ▶ The device may only be cleaned with a damp cloth.

15 Accessories and Spare Parts

⚠ WARNING
Use only original R. STAHL accessories and spare parts.

Designation	Illustration	Description	Art. no.	Weight kg
Protective cap	 05365E00	for protection against pollution	153730	0.120

16 Disposal

The national waste disposal regulations have to be observed.

17 EC Declaration Of Conformity

EG-Konformitätserklärung
EC Declaration of Conformity
Déclaration de Conformité CE

R. STAHL Schaltgeräte GmbH • Am Bahnhof 30 • 74638 Waldenburg, Germany
erklärt in alleiniger Verantwortung, *declares in its sole responsibility, déclare sous sa seule responsabilité,*

dass das Produkt *that the product* *que le produit*	Steckvorrichtung *Plug and socket* *Prise de courant*
Typ, *type, type:*	**G579/..**

auf das sich diese Erklärung bezieht, mit den folgenden Normen oder normativen Dokumenten übereinstimmt.
which is the subject of this declaration, is in conformity with the following standards or normative documents.
auquel cette déclaration se rapporte, est conforme aux normes ou aux documents normatifs suivants.

Bestimmungen der Richtlinie *Terms of the directive* *Prescription de la directive*		Nummer sowie Ausgabedatum der Norm *Number and date of issue of the standard* *Numéro ainsi que date d'émission de la norme*
2006/95/EG: *2006/95/EC:* *2006/95/CE:*	**Niederspannungsrichtlinie** *Low Voltage Directive* *Directive Basse Tension*	EN 60309-1:1999 + A1:2007 EN 60309-2:1999 + A1:2007 EN 60309-4:2007 EN 60947-3:2009 EN 60529:1991 + A1:2000
2004/108/EG: *2004/108/EC:* *2004/108/CE:*	**EMV-Richtlinie** *EMC Directive* *Directive CEM*	Nicht zutreffend nach Artikel 1, Absatz 3. *Not applicable according to article 1, paragraph 3.* *Non applicable selon l'article 1, paragraphe 3.*

Waldenburg, 13. Sept. 2011

Ort und Datum
Place and date
Lieu et date

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